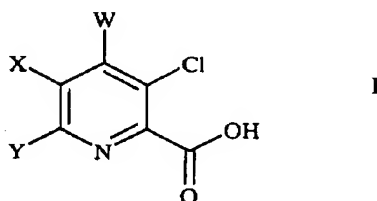


CONTINUED EXAMINATION UNDER 37 CFR 1.114

All of the requirements for a request for continued examination have been fulfilled and the applicants submission filed on February 21, 2007, including amendments to the claims, has been entered.

As amended, Claim 1 is directed to compounds of formula I



wherein

X represents F;

Y represents C₁-C₄ alkyl, C₁-C₄ alkoxy substituted C₁-C₄ alkyl, C₁-C₄ thioalkoxy substituted C₁-C₄ alkyl, or C₂-C₃ alkenyl; and

W represents -NO₂, -N₃, -NR₁R₂, -N=CR₃R₄ or -NHN=CR₃R₄

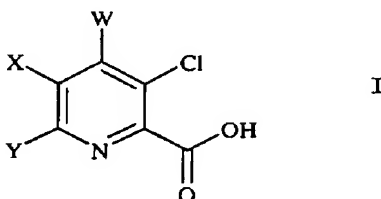
wherein

R₁ and R₂ independently represent H, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl, aryl, hydroxy, C₁-C₆ alkoxy, amino, C₁-C₆ acyl, C₁-C₆ carboalkoxy, C₁-C₆ alkylcarbamyl, C₁-C₆ alkylsulfonyl, C₁-C₆ trialkylsilyl or C₁-C₆ dialkyl phosphonyl; and

R₃ and R₄ independently represent H, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl or aryl; and

agriculturally acceptable derivatives of the carboxylic acid group or the 4-amino group.

Claim 5 is directed to herbicidal compositions containing a herbicidally effective amount of a compound of formula I



wherein

X represents H or F;

Y represents C₁-C₄ alkyl, C₁-C₄ alkoxy substituted C₁-C₄ alkyl, C₁-C₄ thioalkoxy substituted C₁-C₄ alkyl, or C₂-C₃ alkenyl; and

W represents -NO₂, -N₃, -NR₁R₂, -N=CR₃R₄ or -NHN=CR₃R₄

wherein

R₁ and R₂ independently represent H, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl, aryl, hydroxy, C₁-C₆ alkoxy, amino, C₁-C₆ acyl, C₁-C₆ carboalkoxy, C₁-C₆ alkylcarbonyl, C₁-C₆ alkylsulfonyl, C₁-C₆ trialkylsilyl or C₁-C₆ dialkyl phosphonyl; and

R₃ and R₄ independently represent H, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl or aryl; and

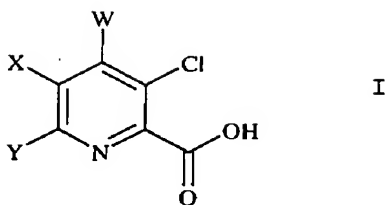
agriculturally acceptable derivatives of the carboxylic acid group or the 4-amino group

in admixture with an agriculturally acceptable adjuvant or carrier.

And Claim 6 is directed to a method of controlling undesirable vegetation which comprises contacting the vegetation or the locus thereof with or applying to the soil to prevent the emergence of vegetation an herbicidally effective amount of a compound of formula I

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wherein

X represents H or F;

Y represents C₁-C₄ alkyl, C₁-C₄ alkoxy substituted C₁-C₄ alkyl, C₁-C₄ thioalkoxy substituted C₁-C₄ alkyl, or C₂-C₃ alkenyl; and

W represents -NO₂, -N₃, -NR₁R₂, -N=CR₃R₄ or -NHN=CR₃R₄

wherein

R₁ and R₂ independently represent H, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl, aryl, hydroxy, C₁-C₆ alkoxy, amino, C₁-C₆ acyl, C₁-C₆ carboalkoxy, C₁-C₆ alkylcarbonyl, C₁-C₆ alkylsulfonyl, C₁-C₆ trialkylsilyl or C₁-C₆ dialkyl phosphonyl; and

R₃ and R₄ independently represent H, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl or aryl; and

agriculturally acceptable derivatives of the carboxylic acid group or the 4-amino group.

It should be noted that for the compound claim (Claim 1) X is defined solely as F, while in the composition and method of use claims (Claims 5 and 6), X is defined as both H and F.

INFORMATION DISCLOSURE STATEMENT

The applicants believe that all relevant prior art references of which they are aware have been submitted in the separate Information Disclosure Statements dated April 2, 2004 and October 13, 2004.

COPENDING APPLICATIONS

The applicants wish to advise the examiner of copending application 10/911,683 filed on August 4, 2004. This application entitled "6-(1,1-DIFLUOROALKYL)-4-AMINOPICOLINATES AND THEIR USE AS HERBICIDES" was granted (November 6, 2007; US 7,291,580) as being patentably distinct over the present application.

SPECIFICATION

The applicants are not aware of any errors in the specification.

DOUBLE PATENTING INVENTION

In the present Office Action, the examiner has repeated the same rejection issued in the Final Rejection dated January 10, 2007 concerning double patenting over Krumel *et al.* (US 6,352,635 or WO 01/51684).

RESPONSE TO ARGUMENTS

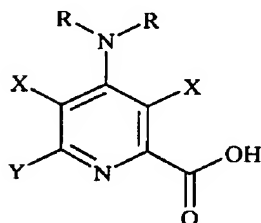
In the first bullet point, the examiner states that previous rejections are withdrawn because the claims, as amended, overcome the rejections. The previous rejections included 1) a rejection under 35 U.S.C. § 112 first paragraph; 2) a double patenting rejection based on Krumel *et al.*; and 3) a rejection under 35 U.S.C. § 102 (e) based on Krumel *et al.*

In the very next bullet point, the Examiner renews the rejection based on Krumel *et al.*, ostensibly because the previous two declarations filed by applicants fail to cover claimed compounds.

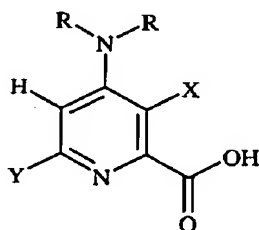
Then, in the last bullet point, despite disregarding the previous declarations because they fail to cover claimed compounds, the examiner asserts that the objective evidence of nonobviousness is not commensurate with the scope of the claims and a showing limited to a single species is not probative of nonobviousness in view of the breadth of the claims.

These last 2 bullet points will be addressed separately.

As pointed out previously in the response accompanying the Request for Continued Examination, Krumel *et al.* discloses starting materials of the formula



wherein X represents Cl or Br, Y represents H, F, Cl, Br or C₁-C₄ alkyl, and R represents H or C₁-C₄ alkyl and final products of the formula



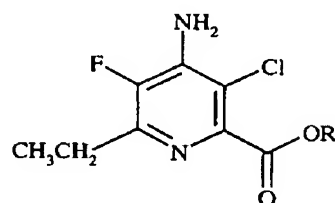
wherein X, Y and R are similarly defined.

Krumel *et al.* does not claim these compounds but rather the method of making one from another. Claims 1, 3 and 4 have now been limited to those compounds in which X = F. Krumel *et al.* does not disclose or suggest such materials because it is not possible to prepare the products (X = H) by the claimed process from a starting material in which X = F. Thus the compounds of Claim 1, 3 and 4 in which X = F are not obvious from Krumel *et al.*

Furthermore, the compounds of Claims 1, 3 and 4 in which X = F are patentably distinct from the products of the process of Krumel *et al.* in which X = H. Contrary to the examiners assertion that the previous declarations filed by the applicants fail to cover the claimed compounds (X = F), the affidavit under 37 C.F.R. § 1.132 by Mr. Paul Schmitzer provided with Response B dated May 3, 2005 shows

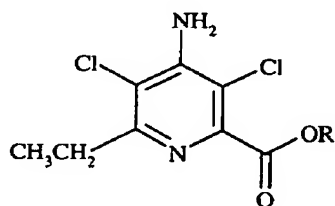
the unexpected efficacy of compounds in which $X = F$ compared to both those in which $X = H$ or Cl .

Compounds F-1 and F-2 are the methyl ester ($R = CH_3$) and acid ($R = H$) respectively of

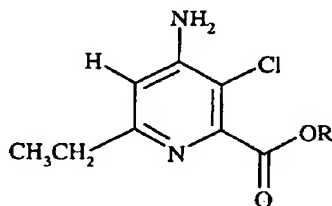


These are clearly compounds within the scope of Claims 1, 3 and 4 ($X = F$, $Y = C_2$ alkyl).

The affidavit also provides comparative data to both Cl-1 and Cl-2, the methyl ester ($R = CH_3$) and acid ($R = H$) forms respectively of a starting material of Krumel *et al.*



and to both H-1 and H-2, the methyl ester ($R = CH_3$) and the acid ($R = H$) form respectively of a product of Krumel *et al.*



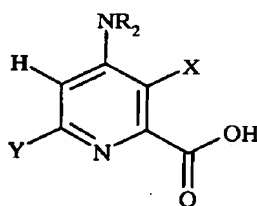
A comparison of the post-emergent GR_{80} values for F-1 and F-2 versus Cl-1 and Cl-2 demonstrate that the compounds of the present invention (<31 g/ha for F=1;

<31 g/ha for F-2) are more efficacious against broadleaf weeds than the starting materials of Krumel *et al.* (61 g/ha for Cl-1; 70 g/ha for Cl-2). The compounds of the present invention are at least about 2 times more active than the prior art compounds. Similarly in pre-emergent comparisons of GR₈₀ values, the compounds of the present invention (<17.5 g/ha for F-1; 21 g/ha for F-2) are at least about 2 times more active than the prior art compounds (43 g/ha for Cl-1; 42 g/ha for Cl-2).

The same affidavit provides a comparison of F-1 and F-2 with the products of Krumel *et al.*, H-1 and H-2. A comparison of the pre-emergent GR₈₀ and GR₅₀ values for F-1 and F-2 versus H-1 and H-2 demonstrate that the compounds of the present invention (<17.5 g/ha and 34 g/ha for F-1; 21 g/ha and 74 g/ha for F-2) are more efficacious against both broadleaf and grass weeds than the products of Krumel *et al.* (548 g/ha and >500 g/ha for H-1; 222 g/ha and >500 g/ha for H-2). The compounds of the present invention are about 10 times more active than the prior art compounds.

Thus the compounds of Claims 1, 3 and 4 of the present invention are patentably distinct from Krumel *et al.*

With respect to Claims 5 (herbicidal compositions) and 6 (methods of use), Krumel *et al.* neither teaches nor suggests that its products where Y is C₁-C₄ alkyl



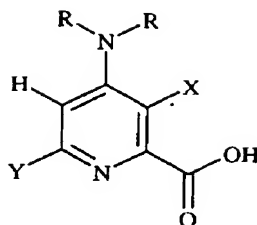
have any herbicidal activity.

After asserting that the affidavits fail to cover the claimed compounds, the examiner then contends that a single species is not commensurate with the scope of the claims.

First, with respect to Krumel *et al.*, the only relevant compounds disclosed are of the following formula

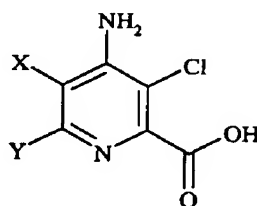
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where X is Cl, Y is C₁-C₄ alkyl and R is H or C₁-C₄ alkyl. This is a relatively limited scope for the prior art.

As taught at page 4 of the present specification, the gist of the present invention is the herbicidal activity of the compounds of the formula

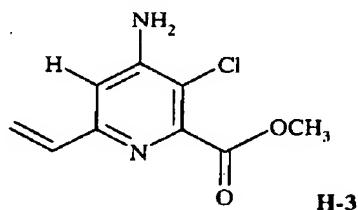


wherein X is H or F and Y is C₁-C₄ alkyl, C₁-C₄ alkoxy substituted C₁-C₄ alkyl, C₁-C₄ thioalkoxy substituted C₁-C₄ alkyl or C₂-C₃ alkenyl. Derivatives of the 4-amino group and the 2-carboxylic acid group of the compounds of the present invention would be expected to reflect comparable benefits over the corresponding derivatives of the prior art compounds. This is in fact demonstrated in Mr. Schmitzer's affidavit of May 3, 2005 where comparable advantages are illustrated for both the free acid (F-2) and the methyl ester (F-1) compared to the corresponding prior art free acids (H-2 and Cl-2) and methyl esters (H-1 and Cl-1). Thus the scope of the present claims is not unduly broad relative to the showings with respect to the 6-ethyl compounds, which would be expected to fairly represent the activity of the definition of substituent Y, at least for C₁-C₄ alkyls and their alkoxy and thioalkoxy substituted derivatives.

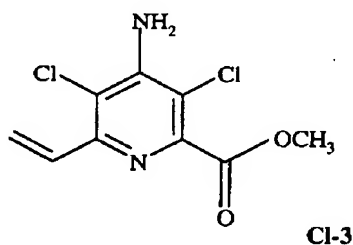
While the applicants do not concede that Krumel *et al.* teaches or suggests that the 6-alkyl substituents on the pyridine ring may be unsaturated, to more fully illustrate the scope of the showing over the prior art, the applicants submit a new

Affidavit under 37 C.F.R. § 1.132 by Mr. Paul Schmitzer. In this affidavit, the herbicidal activity of:

Methyl 4-amino-3-chloro-6-vinylpyridine-2-carboxylate

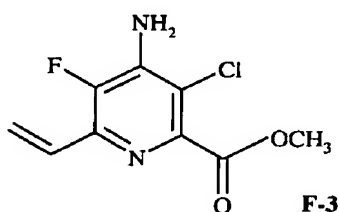


Methyl 4-amino-3,5-dichloro-6-vinylpyridine-2-carboxylate



the closest prior art compounds arguably suggested by Krumel *et al.*, are compared to

Methyl 4-amino-3-chloro-5-fluoro-6-vinylpyridine-2-carboxylate



the analogous 5-fluoro substituted compound of claim 1.

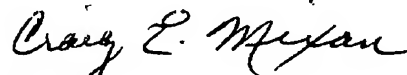
As indicated in Mr. Schmitzer's affidavit, the vinyl analog of the present invention F-3 (GR₈₀ pre 79; GR₈₀ post 95) is unexpectedly more active than the corresponding analogs suggested by the prior art, H-3 (GR₈₀ pre 709; GR₈₀ post 387) and Cl-3 (GR₈₀ pre 939; GR₈₀ post >500).

CLAIM REJECTIONS – 35 U.S.C. § 102(e)

This rejection was repeated again without acknowledgement or rebuttal of applicants' previous response. As pointed out previously, Claims 1 and 3-6 have been rejected under 35 U.S.C. § 102(e) as anticipated by Krumel *et al.* As remarked above, Krumel *et al.* does not render obvious let alone anticipate Claim 1, nor Claims 3 and 4 which depend upon Claim 1, because they neither disclose nor suggest compounds in which $X = F$. In addition, Krumel *et al.* does not disclose the herbicidal compositions and use of the compounds of Claims 5 and 6 in which $X = H$ or F and $Y = C_1-C_4$ alkyl. Thus, the claims of the present invention fulfill the requirements of 35 U.S.C. § 102 and are not anticipated.

In view of these remarks, Claim 1 and 3-6 are considered to be in condition for allowance. Reconsideration of this application and its early allowance are respectfully requested.

Respectfully submitted,



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November 15, 2007